

Operations Report

Rob Harr 21 April 2004 CDF Weekly Meeting



This Week's Stores

Date	Store	Hrs	Inst Lum (initial)	Deliv (nb ⁻¹)	Lum to tape (ε)	Si Phys Lum (ε)	Comment
4/17	3411	7	45.0e30	875	840 (96%)	0	AAK1 prefire, quench @ F4
4/17	3414	22	40.1e30	1557	1354 (87%)	0	Ends cleanly
4/19	3416	2	41.7e30	182	137 (75%)	0	Separator sparks
4/20	3421	25	37.7e30	1585	1436 (91%)	137 (9%)	Si tests, tornado warn
4/21	3423	7	47.6e30	839	735 (88%)	387 (46%)	Quench @ E11
Total				5.0 pb ⁻¹	4.5 pb ⁻¹ (89%)	0.5 pb ⁻¹ (10%)	



The prefire saga

- Last Thurs.: store ended when anti-proton abort kicker prefired.
 - Third prefire in April 2004!
 - Significant radiation dose to silicon
 - another prefire occurred later Thurs. during a wet squeeze.
- Hardware replaced for one abort kicker on Friday.
 - use caution until we see behavior of the new hardware
- Silicon was kept out of the following store (3411)
 - store ended with abort kicker prefire
 - silicon kept out of next two stores
 - silicon integrated for parts of following stores
- We are exercising caution



Beam Position After Quad Alignment

Low-beta quads were aligned during the shutdown

- Lower corrector strengths around B0
- Interaction point is better centered in silicon
- Better agreement between CDF and D0 luminosities (?)

	X (mm)	Y (mm)	Dx/dz (mrad)	Dy/dz (mrad)
SVX position	-1.166	1.436	0.417	-0.190
IP pre-shutdown	-2.600	1.250	0.880	0.130
IP now	-1.500	1.630	0.700	0.065
Change	1.100	0.380	-0.180	-0.065



Summary/Plan

Tevatron

- We're concerned about the abort kicker prefires, and are monitoring the situation
- Replacement of pbar pulsed magnet stacking resumed this morning
- Tevatron has used the time to perform studies.

CDF

- Exercising caution after abort kicker prefires.
- My thanks to Steve Hahn and Masa Tanaka for covering ops during Mon. and Tues.